PA PSRS
Pennsylvania Patient Safety Reporting System

Patient Safety Advisory

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"Give 40 of K " (You Know What I Mean, Don't You?)

Potassium (K) is an infusion commonly given on the basis of a verbal order in response to a laboratory value, particularly in the intensive care unit, where the urgency of correction is higher. Inappropriate potassium infusions are also dangerous, because either an overdose or too rapid an intravenous (IV) infusion of a therapeutic dose can lead to high serum levels, arrhythmia, and death. Reports of problems involving this "high alert" medication are therefore not surprising and are useful examples of the problems of verbal orders.

In one recent report to PA-PSRS, a nurse received a verbal order to give a patient "10 of K." The patient was given 10 mg of vitamin K instead. The reverse problem has also occurred. A verbal order for Vitamin K was incorrectly transcribed as "potassium."

It isn't difficult to imagine how mistakes like these can happen. Consider the following hypothetical exchange between a physician and a nurse:

NURSE:	Doctor, Mrs. Jones' potassium is 2.5.
PHYSICIAN:	Give 40 of K IV.
NURSE:	Thank you.

Such a dialogue can be heard in many hospital settings, but much of the information in the verbally communicated order is implied information. For example:

"40" what?	Milliequivalents? Milliliters? Milligrams?
"K" what?	KCl? KPO4?
"IV"	At what rate? Push (which would be fatal)? Or infused at how many milliliters per minute? And with what diluent: dextrose 5% in water (D5W) or normal saline (NaCl)?
"Thank you."	Did the nurse infer what the doctor implied, that the patient should receive 40 milliequivalents of KCL in 100 ml of D5W IV to be run at a standard rate of 20 ml/hour?

If the doctor were ordering two large pizzas (one with onions and peppers and the other with half pepperoni and half anchovies), would he or she be confident that the order would be delivered as requested if the person taking the order said only "Thank you"? Imagine if the doctor were flying to a conference and, listening to the conversation between the pilot and control tower, heard, "There's lots of traffic today, so land on the runway on the left, because someone else is already making an approach on the right runway." Would he or she get nervous?

Verbal orders are an error-prone, but sometimes necessary, practice. A verbal order from the doctor that includes all the elements (i.e., patient, drug, dose, route, rate) and is read back by the nurse for verification could reduce errors related to the verbal mode of prescribing.

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An Independent Agency of the Commonwealth of Pennsylvania

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